



1753

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# TRANSMITTAL FORM

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Total Number of Pages in This Submission

Application Number	10/526,213
Filing Date	11/14/2005
First Named Inventor	Atsunori Hiratsuka
Art Unit	1753
Examiner Name	
Attorney Docket Number	SHIMIZU-08894

## ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
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<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
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<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	-FORM PTO-1449 and copies of 16 references cited therein
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<input type="checkbox"/> Reply to Missing Parts/Incomplete Application		
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Medlen & Carroll, LLP		
Signature			
Printed name	Christine A. Lekutis		
Date	November 7, 2006	Reg. No.	51,934

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This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Atsunori Hiratsuka *et al.*  
Serial No.: 10/526,213  
Filed: 11/14/2005  
Entitled: **Methods For Separating Substances**

Group No.: 1753  
Examiner:

**INFORMATION DISCLOSURE STATEMENT**

**MS Amendment**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

<b>CERTIFICATE OF TRANSMISSION UNDER 37 C.F.R. § 1.8(a)(1)(i)(A)</b>	
I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.	
Dated: <u>November 7, 2006</u>	By:  Cliff Cannon-Cin

Dear Sir or Madam:

The citations listed below, copies attached, may be material to the examination of the above-identified application, and are therefore submitted in compliance with the duty of disclosure defined in 37 C.F.R. § 1.56 and § 1.97. Also attached for the Examiner's convenience is an English translation of the International Search Report and the International Preliminary Examination Report of the parent International Application No. PCT/JP03/11352.

The Examiner is requested to make these citations of official record in this application:

- U.S. Patent No. 4,680,201 to Hjerten, "Coating for electrophoresis tube," 1987;
- U.S. Patent No. 4,865,706 to Karger *et al.*, "High performance microcapillary gel electrophoresis," 1989;
- U.S. Patent No. 4,865,707 to Karger *et al.*, "Capillary gel electrophoresis columns," 1989;
- U.S. Patent No. 5,074,982 to Novotny *et al.*, "Suppression of electrophoresis with hydrolytically stable coatings," 1991;
- U.S. Patent No. 5,322,608 to Karger *et al.*, Siloxandediol coating for capillary electrophoresis and for general surface modification," 1994;

- U.S. Patent No. 5,447,617 to Shieh, "Coated capillary columns and electrophoresis separation methods for their use," 1995;
- International Publication No. WO 91/06851 of Wiktorowicz, "Flow-rate controlled surface charge coating for capillary electrophoresis," 1991;
- International Publication No. WO 93/22665 of Demorest *et al.*, "Capillary electrophoresis molecular weight separation of biomolecules using a polymer containing solution," 1993;
- International Publication No. WO 95/16911 of Madabhushi *et al.*, "Polymers for separation of biomolecules by capillary electrophoresis," 1995;
- International Publication No. WO 03/084682 of Goodwin *et al.*, "Protective coating composition," 2003;
- JP 5-503989 of Wiktorowicz, "Flow-rate controlled surface charge coating for capillary electrophoresis," 1993, in Japanese accompanied by related English publication WO 91/06851;
- JP 7-506432 of Demorest *et al.*, "Capillary electrophoresis molecular weight separation of biomolecules using a polymer-containing solution," 1995, in Japanese accompanied by related English publication WO 93/22665;
- JP 9-504375 of Madabhushi *et al.*, "Polymers for separation of biomolecules by capillary electrophoresis," 1997, in Japanese accompanied by related English publication WO 95/16911;
- JP 2001-041929 of Tajima *et al.*, "Electrophoretic element," 2001, in Japanese accompanied by computerized English translation;
- JP 2002-148236 of Yamakawa *et al.*, "Electrophoretic apparatus," 2002, provided by WIPO;
- JP 2003-065906 of Horiike *et al.*, "Liquid moving device, liquid component analyzer and method for manufacturing them," 2003, in Japanese accompanied by computerized English translation;
- JP 2005-522312 of Goodwin *et al.*, "Protective coating composition," 2005, in Japanese accompanied by related English publication WO 03/084682;
- Burns, "Surface characterization through measurement of electroosmosis at flat plates," J Colloid Interface Sci, 183:249-259, 1996, provided by WIPO;

- Coolidge, "A simple cataphoresis apparatus," J Biol Chem, 127:551-553, 1939;
- Emoto *et al.*, "Coating of surfaces with stabilized reactive micelles from poly(ethylene glycol)-poly(DL-lactic acid) block copolymer," Langmuir, 15:5212-5218, 1999;
- Esashi, "Micro machine," Applied Physics, 60:227-238, 1991, in Japanese with concise English explanation;
- Gilles *et al.*, "Single nucleotide polymorphic discrimination by an electronic dot blot assay on semiconductor microchips," Nat Biotechnol, 17:365-370, 1999;
- Mikkers *et al.*, "High-performance zone electrophoresis," J Chromatography, 169:11-20, 1979; and
- Tsai *et al.*, "Application of plasma-polymerized films for isoelectric focusing of proteins in a capillary electrophoresis chip," Analyst, 128:237-244, 2003.

This Information Disclosure Statement under 37 C.F.R. § 1.56 and § 1.97 is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one or more of these citations constitutes prior art.

Dated: November 7, 2006



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Patent and Trademark Office

Attorney Docket No.: SHIMIZU-08894

Serial No.: 10/526,213

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(37 CFR § 1.98(b))

(Attach Several Sheets If Necessary)

Applicant: Atsunori Hiratsuka

Filing or 371(c) Date: 11/14/2005

Group Art Unit: 1753

## U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Serial / Patent Number	Issue Date	Applicant / Patentee	Class	Subclass	Filing Date
	1	4,680,201	07/14/1987	Hjerten	427	230	10/30/1985
	2	4,865,706	09/12/1989	Karger et al.	204	182.8	10/21/1986
	3	4,865,707	09/12/1989	Karger et al.	204	182.8	01/12/1988
	4	5,074,982	12/24/1991	Novotny et al.	204	182.8	10/26/1990
	5	5,322,608	06/21/1994	Karger et al.	204	299	12/23/1992
	6	5,447,617	09/05/1995	Shieh	204	299	01/25/1994

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		Document Number	Publication Date	Country / Patent Office	Class	Subclass	Translation	
							Yes	No
	7	WO 91/06851	05/16/1991	PCT				
	8	WO 93/22665	11/11/1993	PCT				
	9	WO 95/16911	06/22/1995	PCT				
	10	WO 2003/084682	10/16/2003	PCT				
	11	JP5-503989	06/24/1993	Japan				
	12	JP7-506432	07/13/1995	Japan				
	13	JP9-504375	04/28/1997	Japan				
	14	JP2001-041929	02/16/2001	Japan				
	15	JP2002-148236	05/22/2002	Japan				
	16	JP2003-065906	03/05/2003	Japan				
	17	JP2005-522312	07/28/2005	Japan				

## OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)

	18	Burns, "Surface characterization through measurement of electroosmosis at flat plates," J Colloid Interface Sci, 183:249-259, 1996, provided by WIPO
	19	Coolidge, "A simple cataphoresis apparatus," J Biol Chem, 127:551-553, 1939
	20	Emoto <i>et al.</i> , "Coating of surfaces with stabilized reactive micelles from poly(ethylene glycol)-poly(DL-lactic acid) block copolymer," Langmuir, 15:5212-5218, 1999
	21	Esashi, "Micro machine," Applied Physics, 60:227-238, 1991, in Japanese with concise English explanation
	22	Gilles <i>et al.</i> , "Single nucleotide polymorphic discrimination by an electronic dot blot assay on semiconductor microchips," Nat Biotechnol, 17:365-370, 1999
	23	Mikkers <i>et al.</i> , "High-performance zone electrophoresis," J Chromatography, 169:11-20, 1979
	24	Tsai <i>et al.</i> , "Application of plasma-polymerized films for isoelectric focusing of proteins in a capillary electrophoresis chip," Analyst, 128:237-244, 2003

Examiner:

Date Considered:

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.